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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|-------------|----------------------|---------------------|------------------|
| 10/037,587 | 10/23/2001 | Seiya Motomiya | 6667/24 (LTC-16-US) | 6477 |
| 7590 | 05/28/2004 | | EXAMINER | |
| BRINKS HOFER GILSON & LIONE | | | EGAN, BRIAN P | |
| P.O. BOX 10395 | | | | |
| CHICAGO, IL 60610 | | | ART UNIT | PAPER NUMBER |
| | | | 1772 | |

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/037,587 | MOTOMIYA, SEIYA | |
| | Examiner Brian P. Egan | Art Unit 1772 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 March 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 6,8,10-13,15-18 and 20-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 6,8,10-13,15-18 and 20-25 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>filed 3/8/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6, 8, 12-13, 17-18, 22, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gosselin et al. (#5,885,677) in view of Smith (#5,935,692), Yuyama et al. (#5,328,754), JP 55-155079 (hereinafter JP '079), and Yoshikawa et al. (#6,045,646).

Gosselin et al. teach a pressure sensitive adhesive label for indicating information (see Abstract; Col. 2, lines 54-55), the pressure sensitive adhesive label constructed such that it is stuck onto a release sheet with a printed layer before the pressure sensitive adhesive label is used (Col. 2, lines 31-37). The label comprises a release sheet with a release sheet base (Col. 4, lines 44-46), a releasing agent layer provided on one of the surfaces of the release sheet base (Col. 4, lines 46-47), and a printed layer provided on the releasing agent layer wherein the printed layer has fixed and/or variable information and is formed with any conventional ink or thermal mass transfer material and is made, for example, with resin and/or wax plus dye or pigment and additives and applied via thermal transfer printing ("barrier medium"; Col. 5, lines 36-46; Col. 6, lines 40-43). The label further comprises a label base (Col. 1, lines 55-56; Fig. 1, #21) and a pressure sensitive adhesive layer provided on one of the surface of the label base (Col. 1, lines 56-57; Fig. 1, #26). The printing layer on the release sheet faces the pressure sensitive adhesive layer (see Fig. 1, #s 22 and 26). The pressure sensitive adhesive layer contains a fluorescent dye (Col. 4, lines 59-60). Gosselin et al. further disclose a method of making the pressure sensitive

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adhesive label wherein a release sheet is prepared with a releasing agent layer and subsequently printed with a printing layer via thermal transfer printing (Col. 5, lines 54-56). A pressure sensitive adhesive label is then prepared and stuck onto the releasing agent layer of the release sheet such that the printed layer faces the pressure sensitive adhesive layer (Col. 5, lines 47-51 and 56-58). Ultimately, the pressure sensitive adhesive label is removed from the release sheet and transferred to a substrate (Col. 5, lines 59-62).

Although Gosselin et al. teach that a wide variety of release liners may be used (Col. 4, lines 44-45), Gosselin et al. only provide a silicone-based release material as an example, thereby failing to teach non-silicone containing release materials. Gosselin also fail to teach the use of a metallic layer in the transfer printing layer and a printed layer formed from epoxy resin and a pigment or dye, although it is noted that Gosselin does broadly teach the use of a resin or wax in combination with a pigment or dye in the transfer printing layer (Col. 5, lines 36-46).

First, it is notoriously well known in the transfer printing art to provide a printed layer comprising epoxy resin in combination with a pigment or dye as evidenced by both Smith (see Col. 2, line 62 to Col. 3, line 3) and Yuyama et al. (see Abstract). Yuyama et al. teach the use of a transfer ink comprising both epoxy resin and pigment or dye for the purpose of providing an ink that is excellent in heat resistance, solvent resistance, and frictional resistance (Col. 1, lines 34-39) while Smith teaches the use of a transfer ink comprising both epoxy resin and pigment or dye for the purpose of providing an ink with excellent heat resistance properties to prevent distortion of the printed message upon the heating or fusing of the substrate during its formation (Col. 3, lines 4-10). It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have combined the teachings of Gosselin et al. with either

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Smith or Yuyuma et al. since each of the aforementioned references are analogous insofar as being directed at transfer printing inks.

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made by modifying Gosselin et al. by selecting epoxy resin as the "resin or wax" used in the transfer barrier layer in combination with pigment or dye as taught by either Smith or Yuyuma et al. in order to provide an ink that is excellent in heat resistance, solvent resistance, and frictional resistance, while also providing an ink with excellent heat resistance properties that prevent distortion of the printed message upon the heating or fusing of the substrate during its formation.

With regards to the non-silicone based release liner, it is notoriously well known in the release liner art to provide a liner with a release sheet base and a releasing agent layer coated upon the release sheet base wherein the releasing agent layer comprises both a thermoplastic polyolefin elastomer and a polyethylene resin as evidenced by JP '079 (see Abstract). JP '079 teaches the use of the non-silicone based release liner for the purpose of providing an adhesive substrate with excellent heat resistance (see Abstract). The effectiveness of a polyolefin elastomer/polyethylene resin release surface in providing a release surface for transfer printing ink is evidenced by Yoshikawa et al. (see Abstract; Col. 4, lines 1-24). It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have combined the teachings of Gosselin et al. and JP '079 since each of the aforementioned references are analogous insofar as being directed at adhesive substrates comprising release liners.

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Gosselin et al. by providing a release liner comprising a release liner base and a polyolefin elastomer/polyethylene resin release coat as taught by JP '079 in order to provide an adhesive substrate with excellent heat resistance. Furthermore, based on Gosselin et al.'s broad disclosure that "a wide variety of release liners may be used," it would have been obvious to one of ordinary skill in the art that such disclosure encompasses both silicone and non-silicone based release liners.

Finally, with regards to the limitation directed at the use of a metal layer in combination with the transfer printing layer, Yoshikawa et al. teach a transfer sheet comprising a non-silicone based release liner (Fig. 1, #1, Fig. 5(c), #1) wherein the pattern of the printing layer may be selected from the group consisting of woodgrain patterns, rift patterns, texture patterns, grain leather patterns, letters, geometrical figures, symbols, line drawings, abstract patterns, solid prints or coat, or combinations thereof (Col. 8, lines 1-5). Depending on the desired end pattern, Yoshikawa et al. teach that the pattern layer may be a thin metal layer, an ink layer, or a combination of the thin metal layer and the printed ink layer (Col. 8, lines 6-20). Therefore, depending on the desired end product, Yoshikawa et al. teach the use of a printed ink layer in combination with a thin metal layer for the purpose of achieving the desired pattern finish. It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have combined the teachings of Gosselin et al. and Yoshikawa et al. since each of the aforementioned references are analogous insofar as being directed at transfer printing substrates.

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Gosselin et al. to include a transfer printing

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layer comprising both a thin metal layer and an ink layer as taught by Yoshikawa et al. in order to achieve a printed pattern selected from the group consisting of woodgrain patterns, rift patterns, texture patterns, grain leather patterns, letters, geometrical figures, symbols, line drawings, abstract patterns, solid prints or coat, or combinations thereof.

3. Claims 10-11, 15-16, 20-21, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gosselin et al. ('677) in view of Smith ('692), Yuyama et al. ('754), JP '079, and Yoshikawa et al. ('646), and further in view of Takizawa et al. (#5,989,707).

Gosselin et al., Smith, Yuyama et al., JP '079, and Yoshikawa et al. teach a pressure sensitive adhesive label as detailed above. The aforementioned prior art is silent as to whether the label base is formed of transparent or non-transparent material. It is notoriously well known in the art, however, to select either a transparent or non-transparent material for the label base depending on the desired end product as evidenced by Takizawa et al. (Col. 4, lines 55-58). Thus, depending on the desired end product, it would have been obvious to have modified the aforementioned prior art to include either a transparent or non-transparent base. Furthermore, even in the absence of the teachings of Takizawa et al., it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have selected either a transparent or non-transparent base material in the aforementioned prior art since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious optimization absent demonstration of unexpected results. *In re Leshin*, 125 USPQ 416.

Response to Arguments

4. Applicant's arguments with respect to claims 6, 8, 10-13, 15-18, and 20-25 have been considered but are moot in view of the new ground(s) of rejection.

The Examiner notes that the Applicant's arguments with regards to Rusincovitch et al. were found to be persuasive. Rusincovitch et al. broadly teaches the use of any type of printing ink but does not explicitly teach the use of epoxy resin based printing ink in combination with a pigment or dye. Furthermore, with regards to the release liner in Rusincovitch et al., although Rusincovitch et al. teach a non-silicone based release liner, the non-silicone based release liners in Rusincovitch et al. are single layered polymeric substrates, not a substrate with a non-silicone based coating. Only the silicone-based release liners comprise a release liner base with a coating (i.e., a silicone coating). Therefore, the Examiner has withdrawn the rejection of the claims from the previous office action involving the teachings of Rusincovitch et al.

Furthermore, in light of the amended claims, the Examiner has withdrawn the 35 U.S.C. 112, second paragraph, rejection of claim 6 from the previous office action.

Finally, the Examiner notes that the rejections from the previous office action involving the teachings of Higgins ('352) have been withdrawn. Higgins only teaches the use of transparent or non-transparent release liners, not transparent or non-transparent label bases.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Egan whose telephone number is 571-272-1491. The examiner can normally be reached on M-F, 8:30-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


BPE
5/23/04
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SUPERVISORY PATENT EXAMINER
1772
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